

- ① Insert the data of a new employee called Julia Long, whose employee number is 1111. Her department number is not known yet. USE Sample; INSERT INTO employee VALUES (1111, 'Julia', 'Long', NULL);
- ② Create a new table called emp-d1-d2 with all employees who work for department d1 or d2 and load the corresponding rows from the employee table. Find two different, but equivalent solutions. USE Sample; CREATE TABLE emp-d1-d2 (emp-no INT NOT NULL, emp-fname CHAR(20) NOT NULL, emp-lname CHAR(20) NOT NULL, dept-no CHAR(4) NULL); INSERT INTO emp-d1-d2 SELECT emp-no, emp-fname, emp-lname, dept-no FROM employee WHERE dept-no IN ('d1', 'd2'); OR USE Sample; SELECT emp-no, emp-fname, emp-lname, dept-no INTO emp-d1-d2 FROM employee WHERE dept-no IN ('d1', 'd2');
- ③ Create a new table of all employees who entered their projects in 2017 and load it with the corresponding rows from the employee table. USE Sample; CREATE TABLE employee-third (emp-no INT NOT NULL, emp-fname CHAR(20) NOT NULL, emp-lname CHAR(20) NOT NULL, dept-no CHAR(4) NULL); INSERT INTO employee-third (emp-no, emp-fname, emp-lname, dept-no) ~~VALUES~~ SELECT emp-no, emp-fname, emp-lname, dept-no FROM employee WHERE emp-no IN (SELECT emp-no FROM works-on WHERE enter-date BETWEEN '01.01.2017' AND '12.31.2017');
- ④ Modify the job of all employees in project P1 who are managers. They have to work as clerks from now on. USE Sample; UPDATE works-on SET job = 'Clerk' WHERE job = 'Manager' AND project-no = 'P1';
- ⑤ The budgets of all projects are no longer determined. Assign all budgets the NULL value. USE Sample; UPDATE project SET budget = NULL;
- ⑥ Modify the jobs of the employee with the employee number 28559. From now on she will be the manager for all her projects. USE Sample; UPDATE works-on SET job = 'Manager' WHERE emp-no = 28559;
- ⑦ Increase the budget of the project where the manager has the employee number 10102. The increase is 10%. USE Sample; UPDATE project SET budget = budget / 10 + budget WHERE project-no IN (SELECT project-no FROM works-on WHERE job = 'Manager' AND emp-no = 10102);
- ⑧ Change the name of the department for which the employee named James works. The new department name is Sales. USE Sample; UPDATE department SET dept-name = 'Sales' WHERE (SELECT dept-no FROM employee WHERE emp-lname = 'James');
- ⑨ Change the enter date for the projects for those employees who work in project P1 and belong to department Sales. The new date is 12.12.2017. USE Sample; UPDATE works-on SET enter-date = '12.12.2017' WHERE project-no = 'P1' AND emp-no IN (SELECT emp-no FROM employee JOIN department ON employee.dept-no = department.dept-no WHERE dept-name = 'Sales');
- ⑩ Delete all departments that are located in Seattle. USE Sample; DELETE FROM departments WHERE location = 'Seattle';
- ⑪ The project P3 has been finished. Delete all information concerning this project in the sample database. USE Sample; DELETE FROM works-on WHERE project-no = 'P3'; DELETE FROM project WHERE project-no = 'P3';
- ⑫ Delete the information in the works-on table for all employees who work for the department located in Dallas. USE Sample; DELETE FROM works-on WHERE emp-no IN (SELECT emp-no FROM employee WHERE dept-no IN (SELECT dept-no FROM department WHERE location = 'Dallas'));



- ① Insert the data of a new employee called Julia Long, whose employee number is 1111. Her department number is not known yet. USE Sample; INSERT INTO employee VALUES (1111, 'Julia', 'Long', NULL);
- ② Create a new table called emp-d1-d2 with all employees who work for department d1 or d2 and load the corresponding rows from the employee table. Find two different, but equivalent solutions. USE Sample; CREATE TABLE emp-d1-d2 (emp-no INT NOT NULL, emp-fname CHAR(20) NOT NULL, emp-lname CHAR(20) NOT NULL, dept-no CHAR(4) NULL); INSERT INTO emp-d1-d2 SELECT emp-no, emp-fname, emp-lname, dept-no FROM employee WHERE dept-no IN ('d1', 'd2'); OR: USE Sample; SELECT emp-no, emp-fname, emp-lname, dept-no INTO emp-d1-d2 FROM employee WHERE dept-no IN ('d1', 'd2');
- ③ Create a new table of all employees who entered their projects in 2017 and load it with the corresponding rows from the employee table. USE Sample; CREATE TABLE employee-third (emp-no INT NOT NULL, emp-fname CHAR(20) NOT NULL, emp-lname CHAR(20) NOT NULL, dept-no CHAR(4) NULL); INSERT INTO employee-third (emp-no, emp-fname, emp-lname, dept-no) ~~VALUES~~ SELECT emp-no, emp-fname, emp-lname, dept-no FROM employee WHERE emp-no IN (SELECT emp-no FROM works-on WHERE enter-date BETWEEN '01.01.2017' AND '12.31.2017');
- ④ Modify the job of all employees in project P1 who are managers. They have to work as clerks from now on. USE Sample; UPDATE works-on SET job = 'Clerk' WHERE job = 'Manager' AND project-no = 'P1';
- ⑤ The budgets of all projects are no longer determined. Assign all budgets the NULL value. USE sample; UPDATE project SET budget = NULL;
- ⑥ Modify the jobs of the employee with the employee number 28559. From now on she will be the manager for all her projects. USE Sample; UPDATE works-on SET job = 'Manager' WHERE emp-no = 28559;
- ⑦ Increase the budget of the project where the manager has the employee number 10102. The increase is 10%. USE sample; UPDATE project SET budget = budget / 10 + budget WHERE project-no IN (SELECT project-no FROM works-on WHERE job = 'Manager' AND emp-no = 10102);
- ⑧ Change the name of the department for which the employee named James works. The new department name is Sales. USE Sample; UPDATE department SET dept-name = 'Sales' WHERE (SELECT dept-no FROM employee WHERE emp-lname = 'James');
- ⑨ Change the enter date for the projects for those employees who work in project P1 and belong to department Sales. The new date is 12.12.2017. USE sample; UPDATE works-on SET enter-date = '12.12.2017' WHERE project-no = 'P1' AND emp-no IN (SELECT emp-no FROM employee JOIN department ON employee.dept-no = department.dept-no WHERE dept-name = 'Sales');
- ⑩ Delete all departments that are located in Seattle. USE sample; DELETE FROM departments WHERE location = 'Seattle';
- ⑪ The project P3 has been finished. Delete all information concerning this project in the sample database. USE Sample; DELETE FROM works-on WHERE project-no = 'P3'; DELETE FROM project WHERE project-no = 'P3';
- ⑫ Delete the information in the works-on table for all employees who work for the department located in Dallas. USE sample; DELETE FROM works-on WHERE emp-no IN (SELECT emp-no FROM employee WHERE dept-no IN (SELECT dept-no FROM department WHERE location = 'Dallas'));